

L32 ANSWER 40 OF 81 CAPLUS COPYRIGHT 2003 ACS on STN

ACCESSION NUMBER: 2002:754199 CAPLUS

DOCUMENT NUMBER: 137:268413

TITLE: Molecular neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons

INVENTOR(S): Iadarola, Michael J.; Olah, Zoltan; Karai, Laszlo

PATENT ASSIGNEE(S): Department of Health and Human Services, USA

SOURCE: PCT Int. Appl., 34 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002076444	A1	20021003	WO 2001-US9425	20010322
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			

PRIORITY APPLN. INFO.: WO 2001-US9425 20010322

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS

RECORD. ALL CITATIONS AVAILABLE IN THE RE

FORMAT

TI Molecular neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons

AB The present invention provides methods and **kits** for the selective ablation of pain-sensing neurons. The methods comprise administration of a vanilloid receptor agonist to a ganglion in an amt. that causes death of vanilloid receptor-bearing neurons. Accordingly,

the present invention provides methods of controlling pain and inflammatory disorders that involve activation of vanilloid receptor-bearing neurons.

ST pain neurosurgery vanilloid receptor ablation **capsaicin** **resiniferatoxin**

IT Ganglion  
(autonomic; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Pain  
(chronic; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Drug delivery systems  
(injections; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Drug delivery systems  
 (intraganglionic; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Anesthetics  
 (local; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Analgesia  
 Ganglion  
 Genetic engineering  
 Transformation, genetic  
 (mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT **Capsaicin** receptors  
 RL: BSU (Biological study, unclassified); BIOL (Biological study)  
 (mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Surgery  
 (neurol.; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Ganglion  
 (spinal; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Nervous system  
 (surgery; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT Ganglion  
 (trigeminal; mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

IT 94-24-6, Tetracaine 137-58-6, Lidocaine 404-86-4, Capsaicin 38396-39-3 57444-62-9, Resiniferatoxin 84057-95-4, Ropivacaine  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (mol. neurosurgery for pain control by local administration of **capsaicin** or **resiniferatoxin** for ablation of vanilloid receptor-bearing neurons)

on STN  
ACCESSION NUMBER: 2000213687 EMBASE  
TITLE: The use of NMDA-receptor antagonists in the treatment of chronic pain.  
AUTHOR: Hewitt D.J.  
CORPORATE SOURCE: Dr. D.J. Hewitt, Department of Neurology, Emory Clinic, 1365 Clifton Road, Atlanta, GA 30322, United States  
SOURCE: Clinical Journal of Pain, (2000) 16/2 SUPPL. (S73-S79).  
Refs: 65  
ISSN: 0749-8047 CODEN: CJPAEU  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Conference Article  
FILE SEGMENT: 008 Neurology and Neurosurgery  
037 Drug Literature Index  
038 Adverse Reactions Titles  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
CT Medical Descriptors:  
\*chronic . . .  
dextro aspartic acid receptor blocking agent: DL, intradermal drug administration  
\*n methyl dextro aspartic acid receptor blocking agent: IP, intraperitoneal drug administration  
\*n methyl dextro aspartic acid receptor blocking agent: SP, intraspinal drug administration  
\*n methyl dextro aspartic acid receptor blocking agent: TL, intrathecal.  
. . methyl dextro aspartic acid receptor  
ketamine: AE, adverse drug reaction  
ketamine: CT, clinical trial  
ketamine: CM, drug comparison  
ketamine: DO, drug dose  
ketamine: DT, drug therapy  
ketamine: SP, intraspinal drug administration  
ketamine: TL, intrathecal drug administration  
ketamine: IV, intravenous drug administration  
ketamine: PO, oral drug administration  
ketamine: SC, subcutaneous drug administration  
dextromethorphan: . . . administration  
dextromethorphan: CB, drug combination  
dextromethorphan: CM, drug comparison  
dextromethorphan: DO, drug dose  
dextromethorphan: DT, drug therapy  
dextromethorphan: DL, intradermal drug administration  
dextromethorphan: IP, intraperitoneal drug administration  
dextromethorphan: SP, intraspinal drug administration  
dextromethorphan: TL, intrathecal drug administration  
dextromethorphan: PO, oral drug administration  
memantine: CM, drug comparison  
memantine: DT, drug therapy  
memantine: IP, intraperitoneal drug administration  
memantine: SP, intraspinal drug administration  
amantadine: DO, drug dose  
amantadine: DT, drug therapy  
opiate  
methadone: DT, drug therapy  
dextropropoxyphene: DT, drug therapy  
ketobemidone: CM, drug comparison  
ketobemidone: DT, drug therapy  
dizocilpine: AE, adverse drug reaction

dizocilpine: CM, drug comparison  
 dizocilpine: DT, drug therapy  
 dizocilpine: IP, intraperitoneal drug administration  
     **dizocilpine: SP, intraspinal drug administration**  
 dizocilpine: TL, intrathecal drug administration  
 2 amino 5 phosphonovaleric acid: DT, drug therapy  
     **2 amino 5 phosphonovaleric acid: SP, intraspinal drug administration**  
 2 amino 5 phosphonovaleric acid: TL, intrathecal drug administration  
 dextrorphan: CB, drug combination  
 dextrorphan: DT, drug therapy  
     **dextrorphan: SP, intraspinal drug administration**  
 formaldehyde  
     **capsaicin**  
 alfentanil: CT, clinical trial  
 alfentanil: CM, drug comparison  
 alfentanil: DT, drug therapy  
 alfentanil: IV, intravenous drug administration  
 morphine: CT, clinical trial  
 morphine: CB, drug combination  
 morphine: CM, drug comparison  
 morphine: DT, drug therapy  
     **morphine: SP, intraspinal drug administration**  
 morphine: TL, intrathecal drug administration  
 morphine: IV, intravenous drug administration  
 morphine: PO, oral drug administration  
 morphine: SC, subcutaneous drug administration  
 phencyclidine: . . . CM, drug comparison  
 phencyclidine: DT, drug therapy  
 lorazepam: CM, drug comparison  
 lorazepam: DT, drug therapy  
 bupivacaine: CB, drug combination  
 bupivacaine: CM, drug comparison  
 bupivacaine: DT, drug therapy  
     **bupivacaine: SP, intraspinal drug administration**  
 naloxone  
 2 amino 4 methyl 5 phosphono 3 pentenoic acid ethyl ester  
 RN. . . 297-88-1, 76-99-3; (dextropropoxyphene) 1639-60-7, 469-62-5;  
 (ketobemidone) 469-79-4; (dizocilpine) 77086-21-6; (2 amino 5  
 phosphonovaleric acid) 76726-92-6; (dextrorphan) 125-73-5, 143-98-6;  
 (formaldehyde) 50-00-0; (**capsaicin**) 404-86-4;  
 (alfentanil) 69049-06-5, 71195-58-9; (morphine) 52-26-6, 57-27-2;  
 (phencyclidine) 77-10-1, 956-90-1; (lorazepam) 846-49-1; (bupivacaine)  
 18010-40-7, 2180-92-9, 55750-21-5; (naloxone) 357-08-4, 465-65-6; (2  
 amino. . .

SPATFULL on STN  
 ACCESSION NUMBER: 2002:67183 USPATFULL  
 TITLE: Use of GLP for the treatment, prevention, diagnosis,  
 and prognosis of bone-related and nutrition-related  
 disorders  
 INVENTOR(S): Henriksen, Dennis Bang, Alleroed, DENMARK

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002037836	A1	20020328
APPLICATION INFO.:	US 2001-954304	A1	20010918 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	GB 2000-22844	20000918
	GB 2000-29920	20001207
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PENNIE AND EDMONDS, 1155 AVENUE OF THE AMERICAS, NEW YORK, NY, 100362711	
NUMBER OF CLAIMS:	57	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	5 Drawing Page(s)	
LINE COUNT:	2814	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

DETD [0328] **capsaicin**  
 DETD . . . be compatible with its intended route of administration.  
 Examples of routes of administration include parenteral, e.g.,  
 intravenous, intramuscular, intraperitoneal, intracapsular,  
**intraspinal**, intrasternal, intratumor, intranasal, epidural,  
 intra-arterial, intraocular, intraorbital, intradermal, subcutaneous,  
 oral (e.g., inhalation), transdermal (topical-particularly to the ears,  
 nose, eyes, or. . .  
 CLM What is claimed is:  
 . . . subcutaneous injection, intramuscular injection, topical, depo  
 injection, implantation, time-release mode, controlled-release mode,  
 intracavitary, intranasal, inhalation, intratumor, intraocular  
 intraperitoneal, intraorbital, intracapsular, **intraspinal**,  
 intrasternal, intra-arterial, intradermal parenteral, transmucosal,  
 nasal, rectal, intravaginal, sublingual, submucosal, transdermal, or  
 transdermal patch route.

L16 ANSWER 22 OF 66 USPATFULL on STN  
 ACCESSION NUMBER: 2002:22460 USPATFULL  
 TITLE: Kappa agonist compounds, pharmaceutical formulations  
 and method of prevention and treatment of pruritus  
 therewith  
 INVENTOR(S): Zhang, Wei Yuan, Collegeville, PA, UNITED STATES  
 Maycock, Alan L., Malvern, PA, UNITED STATES  
 Marella, Michael Anthony, Exton, PA, UNITED STATES  
 Kumar, Virendra, Paoli, PA, UNITED STATES  
 Gaul, Forrest, Glen Moore, PA, UNITED STATES  
 Guo, Deqi, Phoenixville, PA, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002013296	A1	20020131
	US 6486165	B2	20021126
APPLICATION INFO.:	US 2001-803957	A1	20010313 (9)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-372191, filed on 11 Aug  
1999, GRANTED, Pat. No. US 6239154  
Continuation-in-part of Ser. No. US 1998-150369, filed on 9 Sep 1998,  
PENDING Continuation-in-part of Ser. No. US  
1998-34661, filed on 3 Mar 1998, GRANTED, Pat. No. US 5945443  
Division of Ser. No. US 1997-899086, filed on 23 Jul  
1997, GRANTED, Pat. No. US 5744458 Division of Ser.  
No. US 1997-796078, filed on 5 Feb 1997, GRANTED, Pat. No.  
US 5688955 Continuation-in-part of Ser. No. US  
1996-612680, filed on 8 Mar 1996, GRANTED, Pat. No. US  
5646151  
DOCUMENT TYPE: Utility  
FILE SEGMENT: APPLICATION

L16 ANSWER 17 OF 66 USPATFULL on STN

ACCESSION NUMBER: 2002:206794 USPATFULL  
TITLE: Nicotinamide acids, amides, and their mimetics active  
as inhibitors of PDE4 isozymes  
INVENTOR(S): Magee, Thomas Victor, Mystic, CT, UNITED STATES  
Marfat, Anthony, Mystic, CT, UNITED STATES  
Chambers, Robert James, Mystic, CT, UNITED STATES  
PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002111495	A1	20020815
APPLICATION INFO.:	US 2002-62811	A1	20020131 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-265240P	20010131 (60)
	US 1997-43403P	19970404 (60)
	US 1998-105120P	19981021 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY, 10017-5612	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
LINE COUNT:	7710	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . factor (PDGF); (rr) fibroblast growth factor, e.g., basic  
fibroblast growth factor (bFGF); (ss) granulocyte macrophage colony  
stimulating factor (GM-CSF); (tt) **capsaicin** cream; (uu)  
Tachykinin NK.sub.1 and NK.sub.3 receptor antagonists selected from the  
group consisting of NKP-608C; SB-233412 (talnetant); and D-4418; and.

DETD [0664] (rr) **Capsaicin**;  
DETD . . . ingredient in suitable liquid form for delivery by: (1)  
injection or infusion which is intraarterial, intra- or transdermal,  
subcutaneous, intramuscular, **intraspinal**, intrathecal, or  
intravenous, wherein said active ingredient: (a) is contained in  
solution as a solute; (b) is contained in the. . .

R 16 OF 66 USPATFULL on STN

ACCESSION NUMBER: 2002:228358 USPATFULL

TITLE: Thiazolyl-, oxazolyl-, pyrrolyl-, and imidazolyl-acid  
amide derivatives useful as inhibitors of PDE4

isozymes

INVENTOR(S): Marfat, Anthony, Mystic, CT, UNITED STATES  
McKechney, Michael William, Fairport, NY, UNITED

STATES

PATENT ASSIGNEE(S): Pfizer Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002123520	A1	20020905
	US 6559168	B2	20030506
APPLICATION INFO.:	US 2002-62145	A1	20020131 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2001-265486P	20010131 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	PFIZER INC, 150 EAST 42ND STREET, 5TH FLOOR - STOP 49, NEW YORK, NY, 10017-5612	
NUMBER OF CLAIMS:	10	
EXEMPLARY CLAIM:	1	
LINE COUNT:	6963	



FILE 'REGISTRY' ENTERED AT 19:18:20 ON 26 SEP 2003

L1 1 S CAPSAICIN/CN  
L2 1 S RESINIFERATOXIN/CN

FILE 'CAPLUS, USPATFULL, EMBASE, MEDLINE, IPA' ENTERED AT 19:18:56 ON 26 SEP 2003

L3 8047 S INTRAVERTEBRAL OR INTRASPINAL OR (INTRA SPINAL)  
L4 22528 S L1 OR CAPSAICIN  
L5 1147 S L2 OR RESINIFERATOXIN  
L6 1 S L3 (10W) L4  
L7 1 S L3 (10W) L5  
L8 1856 S VANILLOID (10W) RECEPTOR  
L9 1 S L3 (10W) L8  
L10 445 S L4 (10W) L8  
L11 2 S L10 AND L3  
L12 81 S L4 AND L3  
L13 81 S L4 AND L3  
L14 81 S L4 AND L3  
L15 81 S L13 OR L14  
L16 66 DUPLICATE REMOVE L15 (15 DUPLICATES REMOVED)  
L17 3 S L8 AND L3

L23 ANSWER 119 OF 333 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS  
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ACCESSION NUMBER: 2001216569 EMBASE  
TITLE: Prevention of cerebral vasospasm by a **capsaicin**  
derivative, glyceryl nonivamide, in an experimental model  
of subarachnoid hemorrhage.  
AUTHOR: Lin C.-L.; Lo Y.-C.; Chang C.-Z.; Kwan A.-L.; Chen I.-J.;  
Howng S.-L.  
CORPORATE SOURCE: Dr. A.-L. Kwan, Kaohsiung Medical University, Department  
of  
Neurosurgery, No. 100, Shih-Chuan 1st Road, Kaohsiung  
80708, Taiwan, Province of China  
SOURCE: Surgical Neurology, (2001) 55/5 (297-301).  
Refs: 19  
ISSN: 0090-3019 CODEN: SGNRAI  
PUBLISHER IDENT.: S 0090-3019(01)00438-4  
COUNTRY: United States  
DOCUMENT TYPE: Journal; Article  
FILE SEGMENT: 018 Cardiovascular Diseases and Cardiovascular Surgery  
025 Hematology  
030 Pharmacology  
037 Drug Literature Index  
008 Neurology and Neurosurgery  
LANGUAGE: English  
SUMMARY LANGUAGE: English  
TI Prevention of cerebral vasospasm by a **capsaicin** derivative,  
glyceryl nonivamide, in an experimental model of subarachnoid  
hemorrhage.  
AB . . . that stimulating vascular K(+) channel activity prevented the  
development of cerebral vasospasm. Recent evidence indicates that  
glyceryl  
nonivamide (GLNVA), a **capsaicin** derivative, has a vasorelaxant  
effect on the aortic vascular smooth muscle due to the release of  
coronary  
calcitonin gene-related peptide, . . .  
CT Medical Descriptors:  
\*brain vasospasm: PC, prevention  
\*brain vasospasm: DT, drug therapy  
\*subarachnoid hemorrhage: DT, drug therapy  
rabbit  
drug efficacy  
nonhuman  
male  
animal experiment  
animal model  
controlled study  
article  
\*capsaicin derivative: DT, drug therapy  
\*capsaicin derivative: DO, drug dose  
\*capsaicin derivative: DV, drug development  
\*capsaicin derivative: TL, intrathecal drug administration  
glyceryl nonivamide: DT, drug therapy  
glyceryl nonivamide: DO, drug dose  
glyceryl nonivamide: DV, drug development  
glyceryl nonivamide: TL, intrathecal drug administration  
unclassified drug

L23 ANSWER 120 OF 333 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS  
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ACCESSION NUMBER: 2001213364 EMBASE  
TITLE: Brain-derived neurotrophic factor is released in the  
dorsal  
horn by distinctive p

L27 ANSWER 174 OF 175 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS  
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ACCESSION NUMBER: 81022434 EMBASE

DOCUMENT NUMBER: 1981022434

TITLE: Effects of intrathecal **capsaicin** on thermal,  
mechanical and chemical nociceptive response in the cat.

AUTHOR: Abay E.O.; Yaksh T.L.

CORPORATE SOURCE: Neurochir. Res. Dept., Mayo Found., Rochester, Minn.  
55901,

SOURCE: United States  
Pharmacologist, (1980) 22/3 (242).  
CODEN: PHMCAA

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

LANGUAGE: English

TI Effects of intrathecal **capsaicin** on thermal, mechanical and  
chemical nociceptive response in the cat.

CT Medical Descriptors:

\*nociception

\***pain threshold**

cat

dose response

mechanical stimulation

stimulation

thermal stimulation

drug response

abstract report

**intrathecal drug administration**

\*bradykinin

\***capsaicin**

RN (bradykinin) 58-82-2, 5979-11-3; (**capsaicin**) 404-86-4

L27 ANSWER 175 OF 175 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS  
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ACCESSION NUMBER: 80035205 EMBASE

DOCUMENT NUMBER: 1980035205

TITLE: Intrathecal **capsaicin** depletes substance P in the  
rat spinal cord and produces prolonged thermal analgesia.

AUTHOR: Yaksh T.L.; Farb D.H.; Leeman S.E.; Jessell T.M.

CORPORATE SOURCE: Dept. Neurosurg. Res. Pharmacol., Mayo Clin., Rochester,  
Minn. 55901, United States

SOURCE: Science, (1979) 206/4417 (481-483).

CODEN: SCIEAS

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

002 Physiology

029 Clinical Biochemistry

LANGUAGE: English

TI Intrathecal **capsaicin** depletes substance P in the rat spinal  
cord and produces prolonged thermal analgesia.

AB A single intrathecal injection of **capsaicin** depletes substance P  
from primary sensory neurons and causes a prolonged increase in the  
thermal and chemical **pain** thresholds of the rat but no apparent  
change in responses to noxious mechanical stimuli.

CT Medical Descriptors:

\*analgesia

\*heat sensitivity

\*primary afferent depolarization

\***pain threshold**

\*spinal cord

rat

central nervous system

animal experiment

**intrathecal drug administration**

\*substance p

\***capsaicin**

RN (substance p) 33507-63-0; (**capsaicin**) 404-86

L27 ANSWER 172 OF 175 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS  
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ACCESSION NUMBER: 81119063 EMBASE  
DOCUMENT NUMBER: 1981119063  
TITLE: A re-evaluation of the neurochemical and antinociceptive  
effects of intrathecal **capsaicin** in the rat.  
AUTHOR: Nagy J.I.; Emson P.C.; Iversen L.L.  
CORPORATE SOURCE: MRC Neurochem. Pharmacol. Unit, MRC Cent., Med. Sch.,  
Cambridge, United Kingdom  
SOURCE: Brain Research, (1981) 211/2 (497-502).  
CODEN: BRREAP  
COUNTRY: Netherlands  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index  
002 Physiology  
008 Neurology and Neurosurgery  
LANGUAGE: English

TI A re-evaluation of the neurochemical and antinociceptive effects of  
intrathecal **capsaicin** in the rat.  
AB The effect of intrathecal administration of **capsaicin** in the rat  
on thermal nociceptive thresholds and on the content of substance P,  
somatostatin and glutamic acid decarboxylase in. . . horn of the  
spinal  
cord was determined. The results suggest that the depletion of spinal  
cord  
substance P induced by **capsaicin** may not by itself be sufficient  
to explain the observed changes in noxious thermal thresholds, which may  
be related instead. . .  
CT Medical Descriptors:  
\*nociception  
\***pain threshold**  
\*spinal cord dorsal horn  
spinal cord  
animal experiment  
rat  
central nervous system  
intrathecal drug administration  
\*substance p  
\***capsaicin**  
\*glutamate decarboxylase  
\*somatostatin  
RN (substance p) 33507-63-0; (**capsaicin**) 404-86-4;  
(glutamate decarboxylase) 9024-58-2; (somatostatin) 38916-34-6,  
51110-01-1

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ACCESSION NUMBER: 82048920 EMBASE  
DOCUMENT NUMBER: 1982048920  
TITLE: Intracisternal **capsaicin**: Selective degeneration  
of chemosensitive primary sensory afferents in the adult  
rat.  
AUTHOR: Jancso G.  
CORPORATE SOURCE: Dept. Physiol., Univ. Med. Sch., H-6720 Szeged, Hungary  
SOURCE: Neuroscience Letters, (1981) 27/1 (41-45).  
CODEN: NELED5  
COUNTRY: Ireland  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 037 Drug Literature Index

002 Physiology  
030 Pharmacology  
008 Neurology and Neurosurgery  
029 Clinical Biochemistry

LANGUAGE: English

TI Intracisternal **capsaicin**: Selective degeneration of chemosensitive primary sensory afferents in the adult rat.

AB The present study reports that intracisternal administration of **capsaicin** induces the selective degeneration of chemosensitive primary sensory afferents and results in a practically complete abolition of chemical **pain** sensitivity in the adult rat. This treatment, however, failed to affect neurogenic inflammation in the corresponding skin areas. Accordingly, intracisternal **capsaicin** induces merely the degeneration of the centrally directed axons of chemosensitive

primary

sensory neurones (CPSNs). To indicate their particular dual. . . these neurones, through the release of neurogenic factor(s) at their peripheral end, may effectively modulate the afferent input related to **pain** sensation at the level of sensory receptors.

CT Medical Descriptors:

\*chemoreceptor

\*nerve degeneration

\***pain**

\*primary afferent depolarization

\*sensory nerve

\*skin nerve

**intracisternal drug administration**

central nervous system

peripheral nervous system

intracerebroventricular drug administration

animal experiment

rat

nervous system

therapy

intracerebral drug administration

\***capsaicin**

RN (**capsaicin**) 404-86-4

L27 ANSWER 174 OF 175 EMBASE COPYRIGHT 2003 ELSEVIER INC. ALL RIGHTS RESERVED. on STN

ACCESSION NUMBER: 81022434 EMBASE

DOCUMENT NUMBER: 1981022434

TITLE: Effects of intrathecal **capsaicin** on thermal, mechanical and chemical nociceptive response in the cat.

AUTHOR: Abay E.O.; Yaksh T.L.

CORPORATE SOURCE: Neurochir. Res. Dept., Mayo Found., Rochester, Minn. 55901,

United States

SOURCE: Pharmacologist, (1980) 22/3 (242).

CODEN: PHMCAA

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

LANGUAGE: English

TI Effects of intrathecal **capsaicin** on thermal, mechanical and chemical nociceptive response in the cat.

CT Medical Descriptors:

\*nociception

\***pain threshold**

cat

dose response  
mechanical stimulation  
stimulation  
thermal stimulation  
drug response  
abstract report  
    **intrathecal drug administration**  
\*bradykinin  
    **\*capsaicin**

RN (bradykinin) 58-82-2, 5979-11-3; (**capsaicin**) 404-86-4

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ACCESSION NUMBER: 80035205 EMBASE

DOCUMENT NUMBER: 1980035205

TITLE: Intrathecal **capsaicin** depletes substance P in the  
rat spinal cord and produces prolonged thermal analgesia.

AUTHOR: Yaksh T.L.; Farb D.H.; Leeman S.E.; Jessell T.M.

CORPORATE SOURCE: Dept. Neurosurg. Res. Pharmacol., Mayo Clin., Rochester,  
Minn. 55901, United States

SOURCE: Science, (1979) 206/4417 (481-483).

CODEN: SCIEAS

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index

002 Physiology

029 Clinical Biochemistry

LANGUAGE: English

TI Intrathecal **capsaicin** depletes substance P in the rat spinal  
cord and produces prolonged thermal analgesia.

AB A single intrathecal injection of **capsaicin** depletes substance P  
from primary sensory neurons and causes a prolonged increase in the  
thermal and chemical **pain** thresholds of the rat but no apparent  
change in responses to noxious mechanical stimuli.

CT Medical Descriptors:

\*analgesia

\*heat sensitivity

\*primary afferent depolarization

**\*pain threshold**

\*spinal cord

rat

central nervous system

animal experiment

**intrathecal drug administration**

\*substance p

**\*capsaicin**

RN (substance p) 33507-63-0; (**capsaicin**) 404-86-4



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ACCESSION NUMBER: 84165407 EMBASE

DOCUMENT NUMBER: 1984165407

TITLE: Action of intrathecal **capsaicin** and its  
structural analogues on the content and release of spinal  
substance P: Selectivity of action and relationship to  
analgesia.

AUTHOR: Jhamandas K.; Yaksh T.L.; Harty G.; et al.

CORPORATE SOURCE: Department of Pharmacology, Queen's University, Kingston,  
Ont., Canada

SOURCE: Brain Research, (1984) 306/1-2 (215-225).

CODEN: BRREAP

COUNTRY: Netherlands

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index  
002 Physiology  
030 Pharmacology  
008 Neurology and Neurosurgery

LANGUAGE: English

TI Action of intrathecal **capsaicin** and its structural analogues on  
the content and release of spinal substance P: Selectivity of action and  
relationship to analgesia.. . .

AB Intrathecal injections of **capsaicin** (CAP) and 4 other  
homovanillic acid (HVM) derivatives related to the structure of CAP were  
carried out. **Capsaicin**, 1-nonenoylvanillylamide (NVA),  
HVM-dodecylamide (DCA) (but not HVM-cyclohexylamide (CHA) or  
HVM-hexadecylamide (HDC) reduced the spinal content of substance P (SP),  
as. . . using in vivo superfusion of the rat spinal cord, CAP, DCA and  
NVA were found to stimulate release of SP. **Capsaicin** had no  
effect on the levels of CCK or VIP immunoreactivity in the spinal  
superfusate. A tachyphylaxis to the effect. . . and antinociception  
suggest the presence of a specific receptor site associated with a  
specific population of primary afferents through which **pain**  
information may pass. Whether SP is an 'afferent **pain**  
transmitter' is not clear, but at the least, it appears to serve as a  
marker for a population of afferents. . .

CT Medical Descriptors:

- \*analgesia
- \*behavior
- \*drug comparison
- \*drug mechanism
- \*n cyclohexylhomovanillamide
- \*n dodecylhomovanillamide
- \*n hexadecylhomovanillamide
- \*neurotoxicity
- \*spinal cord
- \*tachyphylaxis
- radioimmunoassay
- intoxication
- nervous system
  - intrathecal drug administration
- regional perfusion
- nonhuman
- central nervous system
- peripheral nervous system
- rat
- animal experiment
- animal cell
  - \*capsaicin

\*cholecystokinin  
\*homovanillic acid  
\*kainic acid  
\*nonivamide  
\*piperine  
\*substance p  
\*vasoactive intestinal polypeptide  
RN (capsaicin) 404-86-4; (cholecystokinin) 9011-97-6,  
93443-27-7; (homovanillic acid) 306-08-1; (kainic acid) 487-79-6;  
(nonivamide) 2444-46-4; (piperine) 94-62-2; (substance p) 33507-63-0;  
(vasoactive intestinal polypeptide) 37221-79-7

LE: . Respiratory effects of intrathecal **capsaicin** in  
arthritic and non-arthritic rats.

AUTHOR: Bervoets K.; Colpaert F.C.

CORPORATE SOURCE: Department of Psychology, Vrije Universiteit Brussel,  
Brussel, Belgium

SOURCE: Life Sciences, (1984) 34/25 (2477-2483).  
CODEN: LIFSAK

COUNTRY: United States

DOCUMENT TYPE: Journal

FILE SEGMENT: 037 Drug Literature Index  
015 Chest Diseases, Thoracic Surgery and Tuberculosis  
031 Arthritis and Rheumatism  
030 Pharmacology

LANGUAGE: English

TI Respiratory effects of intrathecal **capsaicin** in arthritic and  
non-arthritic rats.

AB The study determined the effects of intrathecal injection of 50 .mu.g of  
**capsaicin** on respiration in rats with adjuvant arthritis as well  
as in control animals. Whole body plethysmographic measurements of  
steady-state frequency, . . . tidal volume, and minute volume of  
respiration were made 3 hours and for up to 11 days after intrathecal  
injection. **Capsaicin** increased minute volume within 3 hours of  
its intrathecal injection in control animals. Intrathecal  
**capsaicin** also reduced the respiratory response to adjuvant  
arthritis in the experimental animals; the latter effect was apparent 11  
days after injection. This biphasic pattern of **capsaicin** effects  
is consistent with a possible role of substance P in the chronic  
**pain** which is presumably associated with adjuvant arthritis in the  
rat.

DOCUMENT NUMBER: 1989250886  
TITLE: Thermal analgesia following intrathecal **capsaicin** administration in rats - Detailed measurements of thermal analgesia over the lower body by a thermal probe.  
AUTHOR: Harada Y.; Aoki M.; Namiki A.; Shimizu H.; Tsukamoto T.  
CORPORATE SOURCE: Department of Anesthesiology, Sapporo Medical College and Hospital, Sapporo 060, Japan  
SOURCE: Japanese Journal of Anesthesiology, (1989) 38/10 (1329-1334).  
ISSN: 0021-4892 CODEN: MASUAC  
COUNTRY: Japan  
DOCUMENT TYPE: Journal  
FILE SEGMENT: 024 Anesthesiology  
030 Pharmacology  
037 Drug Literature Index

LANGUAGE: Japanese

SUMMARY LANGUAGE: English

TI Thermal analgesia following intrathecal **capsaicin** administration in rats - Detailed measurements of thermal analgesia over the lower body by a thermal probe.

AB This study was undertaken to examine the thermal **pain** thresholds over a wide area of the lower body surface following the intrathecal administration of **capsaicin** in rats. Thermal nociceptive thresholds measured under light halothane anesthesia were determined as skin twitch or escape response latencies to the heat stimulation (52.0.degree.C) by a thermal probe. **Capsaicin** (50.mu.g in 10.mu.l) was injected through a chronically implanted catheter whose tip was near the lumbar enlargement of the spinal cord. The hot-plate test (52.0.degree.C) was also performed in all rats tested. Increases in thermal **pain** thresholds were consistently observed in the low back and abdominal region, while the hind paws did not always respond with. . . the sole of hind paws measured by hot-plate test correlated well with those by thermal probe test. In conclusion, intrathecal **capsaicin** definitely produced thermal analgesia, but its intensity was considerably variable in the hind paws. These results are in keeping with our previous finding that there was much variability in the effect

of

**capsaicin** assessed by the hot-plate test, indicating a possibility that **capsaicin** does not spread uniformly in the CSF because of its water insolubility or difficulty in penetrating to the large nerve.

ITILE: Capsaicin and pain mechanisms.  
AUTHOR: Winter J.; Bevan S.; Campbell E.A.  
CORPORATE SOURCE: Sandoz Institute Medical Research, Gower Place, London WC1E  
6BN, United Kingdom  
SOURCE: British Journal of Anaesthesia, (1995) 75/2 (157-168).  
ISSN: 0007-0912 CODEN: BJANAD  
COUNTRY: United Kingdom  
DOCUMENT TYPE: Journal; General Review  
FILE SEGMENT: 024 Anesthesiology  
037 Drug Literature Index  
LANGUAGE: English

TI Capsaicin and pain mechanisms.

CT Medical Descriptors:

- \*pain
- analgesia
- animal experiment
- arthritis
- clinical trial
- controlled study
- desensitization
- double blind procedure
- drug effect
- drug efficacy
- drug mechanism
- drug structure
- human
- human experiment
- hyperalgesia
- intradermal drug administration
- intrathecal